

STATE	PROJECT NUMBER	SHEET NO.	TOTAL SHEETS
GA.	BRSTO-0076-01(037)	59	148

GENERAL NOTES

SPECIFICATIONS - GEORGIA STANDARD SPECIFICATIONS, 2001 EDITION, AND 2008 SUPPLEMENTAL SPECIFICATIONS AS MODIFIED BY CONTRACT DOCUMENTS.

REINFORCING STEEL - PLACE AND TIE ALL REINFORCING STEEL IN ACCORDANCE WITH THE GEORGIA DOT SPECIFICATIONS. DO NOT WELD REINFORCING STEEL.

CHAMFER - CHAMFER ALL EXPOSED CONCRETE EDGES 3/4" UNLESS OTHERWISE NOTED.

EXISTING BRIDGE PLANS - ORIGINAL BRIDGE PLANS MAY BE PURCHASED BY SUBMITTING A REQUEST ON THE GEORGIA DOT WEBSITE AT:  
HTTP://WWW.DOT.GA.GOV/DOINGBUSINESS/RESEARCH/PAGES/ROADDESIGNSEARCH.ASPX  
THE ORIGINAL BRIDGE WAS BUILT UNDER THE PROJECT NO.: H017088

TRAFFIC CONTROLS - ROAD TO BE CLOSED DURING BRIDGE CONSTRUCTION. SEE ROADWAY PLANS FOR DETOUR, TRAFFIC CONTROLS AND TRAFFIC CONTROL PAYMENT.

WAITING PERIOD - NONE REQUIRED.

PLAN DRIVING OBJECTIVE-SEE SUBSTRUCTURE DETAILS.

SMOOTH DOWEL BARS - PLACE SMOOTH DOWEL BARS IN FORMED 3" DIAMETER X 12" DEEP HOLES AND GROUT IN PLACE SIMILAR TO ANCHOR BOLTS, SEE SUB-SECTION 501.3.05.B.3 OF THE GEORGIA DOT SPECIFICATIONS. STIRRUPS MAY BE SHIFTED SLIGHTLY TO CLEAR FORMED HOLES.

UTILITY HANGERS - FURNISH AND INSTALL INSERTS. INSERTS SHALL BE ANVIL FIGURE 282, COOPER B-LINE CONCRETE INSERT B3014, OR APPROVED EQUAL CONCRETE INSERTS. INCLUDE THE COST OF FURNISHING AND INSTALLING INSERTS IN THE OVERALL BID SUBMITTED. ALL OTHER COMPONENTS OF HANGER ASSEMBLIES SHALL BE FURNISHED AND INSTALLED BY UTILITY OWNER.

WATER/SEWER MAIN HANGERS - PIPE ROLL SUPPORT ASSEMBLIES AND KEEPER STRAPS SHALL BE FURNISHED AND INSTALLED BY THE UTILITY OWNER. FURNISH AND INSTALL ALL OTHER COMPONENTS OF HANGER ASSEMBLIES AND INCLUDE THE COST IN THE OVERALL BID SUBMITTED.

GROOVED CONCRETE - GROOVE THE ENTIRE LENGTH OF THE BRIDGE TRANSVERSELY AS PER SUB-SECTION 500.3.05.T.9.C OF THE GEORGIA DOT SPECIFICATIONS.

STANDARD PLAN MODIFICATION - MODIFY THE APPROACH SLAB STANDARD TO INCREASE THE 3/4" EXPANSION JOINT SHOWN BETWEEN THE APPROACH SLAB AND THE BACK FACE PAVING REST AND END POST TO 1". SEE ROADWAY PLANS FOR APPROACH SLAB PAYMENT.

WELDING - ALL WELDING ON GEORGIA DOT PROJECTS SHALL BE PERFORMED BY CERTIFIED WELDERS THAT HAVE IN THEIR POSSESSION A CURRENT WELDING CERTIFICATION CARD ISSUED BY THE OFFICE OF MATERIALS AND RESEARCH. USE ONLY E70XX (EXCLUDING E7014 AND E7024) LOW HYDROGEN ELECTRODES FOR MANUAL SHIELDED METAL ARC WELDING.

SALVAGE MATERIAL - NO MATERIAL REMOVED FROM THE EXISTING STRUCTURE SHALL BE SALVAGED FOR USE BY THE GEORGIA DOT.

INCIDENTAL ITEMS - INCLUDE THE COST INCIDENTAL TO THE WORK THAT IS NOT SPECIFICALLY COVERED BY THE GEORGIA STANDARD SPECIFICATIONS, SUPPLEMENTAL SPECIFICATIONS AND/OR SPECIAL PROVISIONS IN THE OVERALL BID SUBMITTED. THIS INCLUDES THE COST OF WATERPROOFING, JOINT FILLERS, AND OTHER INCIDENTAL ITEMS NECESSARY TO COMPLETE THE WORK.

DESIGN DATA

SPECIFICATIONS ----- AASHTO 17TH EDITION, 2002  
(DESIGNED FOR SEISMIC PERFORMANCE CATEGORY A)

TYPICAL HS20-44 AND/OR MILITARY LOADING ----- IMPACT ALLOWED

FUTURE PAVING ALLOWANCE ----- 30 LBS PER SQ FT

CONCRETE: SUPERSTRUCTURE ----- CLASS AA,  $f'_c$  = 3,500 PSI  
PSC BEAMS ----- CLASS AAA, SEE BEAM SHEETS  
PSC BEAM ALLOWABLE TENSION ----- SEE BEAM SHEETS  
SUBSTRUCTURE ----- CLASS AA,  $f'_c$  = 3,500 PSI

REINFORCEMENT STEEL: ----- GRADE 60,  $f_y$  = 60,000 PSI

PRETENSIONING STRANDS: -----  $f'_s$  = 270,000 PSI

SUMMARY OF QUANTITIES

PAY ITEM NUMBER	QUANTITY	UNIT	PAY ITEM
441-0004	127	SY	CONC SLOPE PAV, 4 IN
500-0100	1097	SY	GROOVED CONCRETE
500-1006	LUMP	LS	SUPERSTR CONCRETE, CL AA, BR NO - 1 (339)
500-2100	458	LF	CONCRETE BARRIER
500-3002	150	CY	CLASS AA CONCRETE
507-9003	764	LF	PSC BEAMS, AASHTO TYPE III, BR NO - 1
507-9030	625	LF	PSC BEAMS, AASHTO, BULB TEE, 54 IN, BR NO - 1
511-1000	25077	LB	BAR REINF STEEL
511-3000	LUMP	LS	SUPERSTR REINF STEEL, BR NO - 1 (80262)
520-1125	420	LF	PILING IN PLACE, STEEL H, HP 12 X 53
520-4125	1	EA	LOAD TEST, STEEL H, HP 12 X 53 (IF REQD)
524-0010	110	LF	DRILLED CAISSON - 48 IN
540-1102	LUMP	LS	REMOVAL OF EXISTING BR, BR NO - 1
603-2024	4085	SY	STN DUMPED RIP RAP, TP 1, 24 IN
603-7000	4085	SY	PLASTIC FILTER FABRIC

BRIDGE CONSISTS OF

1 - 105'-0" BULB TEE, 54 IN, PSC BEAM SPAN ----- SPECIAL DESIGN

1 - 70'-0" TYPE III PSC BEAM SPAN ----- SPECIAL DESIGN

1 - 60'-0" TYPE III PSC BEAM SPAN ----- SPECIAL DESIGN

2 - STEEL H PILE END BENTS ----- SPECIAL DESIGN

2 - CONCRETE INTERMEDIATE BENTS ----- SPECIAL DESIGN

4 - END POST AND GUARDRAIL ATTACHMENT DETAIL ----- GA. STD. 3054 (9-30-02)  
(L = 4'-0"; W = 1'-1"; H = 2'-8")

BAR BENDING DETAIL ----- GA. STD. 3901 (8-69)

TYPICAL FILL DETAIL AT END OF BRIDGE ----- GA. STD. 9037 (9-99)

DRAINAGE DATA

DRAINAGE AREA ----- 6.29 SQ MILES

FLOOD FREQUENCY	CREEK FLOOD STAGE			BACKWATER
	DISCHARGE TOTAL	VELOCITY MEAN	UNDER FLOODSTAGE AREA OF OPENING	
50 YEAR	2043 CFS	2.96 FPS	689 SQ FT	0.00 FT
100 YEAR	2415 CFS	3.46 FPS	699 SQ FT	0.00 FT
500 YEAR	3412 CFS	4.80 FPS	710 SQ FT	0.00 FT

(FLOOD POOLS - CLARKS HILL/J. STROM THURMOND LAKE)				
FLOOD FREQUENCY	DISCHARGE TOTAL	VELOCITY MEAN	UNDER FLOODSTAGE AREA OF OPENING	BACKWATER
50 YEAR	2043 CFS	0.44 FPS	4,592 SQ FT	0.00 FT
100 YEAR	2415 CFS	0.51 FPS	4,750 SQ FT	0.00 FT
500 YEAR	3412 CFS	0.66 FPS	5,138 SQ FT	0.00 FT

TRAFFIC DATA

TRAFFIC ----- ADT = 5,900 8(201)  
ADT = 9,000 (2038)

DESIGN SPEED ----- 55 MPH

TRUCKS ----- 7.5 %

24 HR TRUCKS ----- 10 %

DIRECTIONAL ----- 60 %

UTILITIES

12 INCH DIAMETER WATER MAIN ----- COLUMBIA COUNTY WATER AND SEWER

6 INCH DIAMETER POWER CABLE CONDUIT ----- GEORGIA POWER COMPANY

4 INCH DIAMETER BROADBAND CABLE CONDUIT ----- COLUMBIA COUNTY

4 INCH DIAMETER TELEPHONE CABLE CONDUIT ----- AT&T

BRIDGE NO. 1

DATE					GEORGIA DEPARTMENT OF TRANSPORTATION ENGINEERING DIVISION-OFFICE OF BRIDGES AND STRUCTURES												
	REVISIONS					GENERAL NOTES S.R. 47 OVER KEG CREEK (CLARKS HILL / J. STROM THURMOND LAKE) COLUMBIA CO. BRSTO-0076-01(037)											
							NO SCALE JANUARY 2012										
DRAWING NO. 35-002																	
BRIDGE SHEET 2 OF 18					BY JLM						DESIGNED JLM	CHECKED RAG	REVIEWED WEI/WMD				
											DRAWN JLM	DESIGN GROUP RAG	APPROVED BFR				